

Claims

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What is claimed is:

1. A system for installing software onto a recipient computer,
comprising:
10 a build library, said build library including at least one vendor provided
installation program for installing a specific software package onto a computer; and
a build generating station, said build generating station having build
generating software, said build generating software for generating a build plan which,
when executed on a recipient computer, causes software to be installed on the recipient
15 computer utilizing the at least one installation program,
wherein the build library is accessible to recipient computers via a
network.
2. A system for installing software onto a recipient computer
20 according to claim 1, wherein the network is the Internet.

3. A system for installing software onto a recipient computer according to claim 1, further comprising a build plan transfer means for transferring a build plan generated on the build generating station to a recipient computer.

5 4. A system for installing software onto a recipient computer according to claim 3, wherein the transfer means comprises a build plan transfer device associated with the build generating station.

10 5. A system for installing software onto a recipient computer according to claim 4, wherein the build plan transfer device is a writeable removable memory unit.

15 6. A system for installing software onto a recipient computer according to claim 5, wherein the writeable removable memory unit is a floppy disk drive.

7. A system for installing software onto a recipient computer according to claim 4, wherein the build plan transfer device is a writeable compact disk drive.

8. A system for installing software onto a recipient computer according to claim 3, wherein the transfer means comprises a network interface associated with the build generating station, said network interface communicably connecting the build generating station to a network, said network being accessible to a
5 recipient computer.

9. A system for installing software onto a recipient computer according to claim 1, wherein said build generating station further is for generating build plans which when executed on a recipient computer cause at least one security feature to
10 be provided to a recipient computer.

10. A system for installing software onto a recipient computer according to claim 9, wherein the at least one security feature comprises a certification file.
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11. A system for installing software onto a recipient computer according to claim 1, wherein build plans generated by the build generating station include at least one program installation command, said program installation command causing a computer program to be installed onto a recipient computer according to
20 parameters stored in a software installation data package.

12. A system for installing software onto a recipient computer according to claim 11, wherein the software installation data package includes a parameter identifying whether the recipient computer should be initialized upon completion of the installation of a computer program associated with the software
5 installation data package.

13. A system for installing software onto a recipient computer according to claim 11, wherein the software installation data package includes a data field for identifying a text file, said text file identifying data required to be provided to a
10 software installation program in response to queries generated by the software installation program.
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14. A system for installing software onto a recipient computer according to claim 11, wherein the software installation data package includes a data field for identifying programs which must be running on a recipient computer for a software
15 installation program associated with the software installation data package to be successfully executed on a recipient computer.

15. A system for installing software onto a recipient computer according to claim 11, wherein the software installation data package includes a data field for identifying programs which can not be running on a recipient computer for a software installation program associated with the software installation package data to be successfully executed on a recipient computer.

16. A system for installing software onto a recipient computer, the system comprising:

a build generator, said build generator including build generating software
10 and a build plan transfer device for transferring a build plan to a recipient computer; and
a build server, the build server including a library of installable software
and an interface allowing communications between the build server and a recipient
computer,
wherein the build generator generates a build plan, said build plan when
15 executed on a recipient computer causing installable software to be installed on the
recipient computer.

17. A system for installing software onto a recipient computer according to claim 16 wherein the build generator further includes an input device, said
20 input device receiving from a build requester information identifying installable software desired to be installed on a recipient computer.

18. A system for installing software onto a recipient computer according to claim 17, wherein the input device comprises a monitor and keyboard connected to the build generator.

5 19. A system for installing software onto a recipient computer according to claim 17, wherein the input device comprises an Internet appliance connected to the build generator via an Internet connection.

10 20. A system for installing software onto a recipient computer according to claim 16, wherein the build plan transfer device comprises a writeable removable memory unit, said writeable removable drive for storing a build plan on a transportable memory unit.

15 21. A system for installing software onto a recipient computer according to claim 16, wherein the writeable removable memory drive is located remotely from the build generating station, said writeable removable memory unit in communication with the build generator.

20 22. A system for installing software onto a recipient computer according to claim 16, wherein the build generating station and the build server are combined on a single computer.

23. A system for installing software onto a recipient computer according to claim 16, wherein the build generator further comprises a build information database, said build information database containing software installation data package definitions for installing software onto a recipient computer.

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24. A system for installing software onto a recipient computer according to claim 16, wherein the build generator creates build plans, wherein said build plans include at least one instruction insertable in a registry.

10 25. A system for installing software onto a recipient computer according to claim 16, wherein the build generator creates build plans, wherein said build plans comprise an executable file, said executable file capable of being executed automatically upon start-up of a recipient computer.

15 26. A system for installing software onto a recipient computer according to claim 25, wherein the executable file generated by the build generator further comprises instructions for installing at least one security feature onto a recipient computer.

20 27. A system for installing software onto a recipient computer according to claim 25, wherein the executable file generated by the build generator further comprises information identifying the recipient computer for a network.

28. A system for installing software onto a recipient computer according to claim 25, wherein the executable file generated by the build generator further comprises information identifying a communications path to a build library.

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29. A system for installing software onto a recipient computer according to claim 16, wherein the build generator creates build plans, said build plans comprising at least one installation instruction, said installation instruction utilizing a pre-defined list of parameters for installing a software package, said pre-defined list of
10 parameters including information identifying an installation command for a software installation program and information indicating whether a recipient computer should be restarted upon completion of execution of an installation program.

30. A system for installing software onto a recipient computer
15 according to claim 29, wherein the pre-defined list of parameters further includes a value identifying a text file, said text file including responses required during an installation of a software package onto a recipient computer.

31. A system for installing software onto a recipient computer
20 according to claim 29, wherein the defined list of parameters further includes a value indicating whether additional programs must be running on a recipient computer before an installation program can successfully install software onto a recipient computer.

32. A system for installing software onto a recipient computer according to claim 29, wherein the defined list of parameters further includes a value for identifying software services which are required to be running on a recipient computer
5 before an installation program can successfully install software onto recipient computer.

33. A system for installing software onto a recipient computer according to claim 29, wherein the pre-defined list of parameters further includes a value indicating whether other software services can not be running on a recipient computer for
10 an installation program to successfully install software onto a recipient computer.

34. A system for installing software onto a recipient computer according to claim 29, wherein the pre-defined list of parameters further includes identification of programs which cannot be running on a recipient computer for an
15 installation program to successfully install software onto a recipient computer.

35. A system for installing software onto recipient computers, said
recipient computers distributed at a plurality of locations, comprising:
at least one build library recipient computers via a network;
at least one build generating station, said build generating station
5 including build generating software, said build generating software generating build plans
in response to information identifying software desired to be installed onto a recipient
computer,
wherein said build plans comprise at least one installation instruction, said
installation instruction identifying a software package to be installed onto a recipient
10 computer, said installation instruction using a standardized installation data package
definition, said standardized installation data package definition capable of defining a
plurality of software package installation parameters.

36. A system for installing software onto recipient computers
15 according to claim 35, further comprising a plurality of build libraries, at least one of said
build libraries being co-located at each of the plurality of locations at which software is to
be installed onto a recipient computer.

37. A system for installing software onto recipient computers
20 according to claim 36, wherein the at least one build generating station further comprises
a build plan transfer means for transferring a build plan generated by the build generating
station to a recipient computer.

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38. A system for installing software onto recipient computers according claim 37, wherein said build library further comprises an Internet interface connecting the build library to the build generating station, wherein the build plan transfer means comprises a build transfer device, said transfer device embodying a build plan on a tangible medium for transfer to a recipient computer.

39. A system for installing software onto recipient computers according to claim 37, wherein said build library further comprises an Internet interface connecting the build library to the build generating station, wherein the build plan transfer means comprises a network, said network accessible by a recipient computer.

40. A system for installing software onto recipient computers according to claim 35, wherein the at least one build generating station further comprises an interface for receiving desired build information from a build requester.

41. A system for installing software onto recipient computers according to claim 40, wherein the interface for receiving desired build information comprises an Internet interface, said Internet interface being connected to the Internet.

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42. A system for installing software onto recipient computers, said
recipient computers being distributed among at least two locations, comprising:

at least two build libraries, said build libraries distributed among the at
least two locations, said build libraries further including a network interface, said network
5 interface accessible by recipient computers co-located with the build library;

at least one build generating station, the at least one build generating
station generating build plans in accordance with information identifying software
desired to be installed onto a recipient computer, said at least one build generating station
receiving information identifying software desired to be installed onto a recipient
10 computer via a build requester interface, said build generating station being
communicably connected to a network, said network accessible by recipient computers.

43. A system for installing software onto recipient computers
according to claim 42, wherein the build requester interface comprises software for
15 generating build request displays and an internet interface, said build request displays for
prompting a build requester to identify software desired to be installed onto a recipient
computer, said internet interface for communicating said build request displays to a
remotely located build requester via the Internet.

44. A system for installing software onto recipient computers according to claim 42, wherein the at least one build generating station further comprises a build information database, said build information database comprising installation data packages associated with software available for installation from the at least two build libraries, said installation data packages identifying parameters associated with installation programs contained in said build libraries.

45. A system for installing software onto recipient computers according to claim 42, further comprising at least one recipient computer associated with each build library, wherein each recipient computer is communicably connected to the associated build library via a network.

46. A process for installing software onto a recipient computer, comprising the steps of:
15 receiving from a build requester information identifying software to be installed on a recipient computer;
generating a build plan for installing the identified software onto the recipient computer;
transferring the build plan to the recipient computer;
executing the build plan on the recipient computer, wherein the recipient computer accesses data necessary for installing software via a network connection to a build library.

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47. A method of installing software onto a recipient computer according to claim 46, wherein the step of generating a build plan comprises creating an executable file, said executable file including at least one command to execute an installation program on a recipient computer.

48. A method of installing software onto a recipient computer according to claim 47, wherein the step of generating a build plan further comprises the step of determining whether security features are required to be present on a recipient computer for an installation program to successfully execute, and when security features are required, appending instructions to a build plan to install required security features on a recipient computer.

49. A method of installing software onto a recipient computer according to claim 46, wherein the generated build plan comprises an executable file, said executable file when installed on a recipient computer automatically executing when said recipient computer is restarted.

50. A method of installing software onto a recipient computer according to claim 49, wherein the executable file comprises a plurality of command lines, each of said command lines causing a software installation program to be executed on a recipient computer in accordance with information contained in an installation data package.

51. A method of installing software onto a recipient computer according to claim 50, wherein each installation package includes an installation command associated with an installation program for which installation is desired.

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52. A method of installing software onto a recipient computer according to claim 51, wherein each installation package further contains a value indicating whether a recipient computer should be restarted upon completion of execution of an installation program.

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53. A method of installing software onto a recipient computer according to claim 51, wherein each installation data package further identifies a text file, said text file providing responses for queries from a installation program during execution of the installation program.

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54. A method of installing software onto a recipient computer according to claim 51, wherein each data package further comprises a field for identifying programs which are required to be running on a recipient computer in order for an installation program associated with the installation data package to successfully run.

55. A method of installing software onto a recipient computer according to claim 51, wherein each data package further comprises a field for identifying programs which can not be running on a recipient computer in order for an installation program associated with the installation data package to successfully run.

56. A method of installing software onto a recipient computer according to claim 46, wherein the generated build plan comprises a set of at least two run-once instructions, said at least two run-once instructions insertable into a registry file such that said at least two run-once instructions are executed sequentially upon start-up of a recipient computer, where the run-once instructions have been inserted into the registry of the recipient computer.

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57. A method of installing software onto a recipient computer according to claim 56, wherein the at least two run-once instructions cause at least two software installation programs to be executed in accordance with sets of parameters identified in installation data packages associated with the installation programs to be 5 executed.

58. A method of installing software onto a recipient computer according to claim 57, wherein each installation data package identifies whether a recipient computer should be restarted upon completion of a installation program 10 associated with the installation data package.

59. A method of installing software onto a recipient computer according to claim 57, wherein each installation data package further identifies a text file, said text file providing responses for queries from an associated installation program 15 during execution of the installation program.

60. A method of installing software onto a recipient computer according to claim 57, wherein each installation data package further comprises a field for identifying programs which are required to be running on a recipient computer in 20 order for an installation program associated with the installation data package to successfully run.

61. A method of installing software onto a recipient computer according to claim 57, wherein each installation data package further comprises a field for identifying programs which can not be running on a recipient computer in order for an installation program associated with the installation data package to successfully run.

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62. A computer-readable medium tangibly embodying instructions which, when executed by a computer, implement a process comprising the steps of:
receiving from a build requester information identifying software desired
to be installed on a recipient computer;
10 generating a build plan for installing the identified software onto the
recipient computer, said build plan identifying installation parameters associated with
software desired to be installed on a recipient computer, said build plan further
identifying a source for a recipient computer to access installation programs for software
desired to be installed on a recipient computer; and
15 storing the build plan on media which can be accessed by a recipient
computer.

63. A computer-readable medium tangibly embodying instructions according to claim 62, wherein the source for a recipient computer to access installation
20 programs comprises a build library, said build library accessible to a recipient computer
via a network connection.

64. A computer readable medium tangibly embodying instructions according to claim 63, wherein the instructions further comprise the steps of determining whether software desired to be installed on a recipient computer requires the presence of a security feature on a recipient computer, and where said security feature is required, 5 including in the build plan instructions for providing the security feature to a recipient computer.

65. A computer readable medium tangibly embodying instructions according to claim 61, wherein the source for a recipient computer to access installation 10 programs comprises source libraries provided by software vendors.

66. A computer readable medium tangibly embodying instructions according to claim 65, wherein the instructions further comprise determining whether software desired to be installed on a recipient computer requires the presence of 15 authentication means on the recipient computer, and where said authentication means is required, including instructions for installing the authentication means with the build plan.

67. A computer readable medium tangibly embodying instructions 20 according to claim 62, wherein said build plan causes run once instruction lines to be inserted into the registry of a recipient computer.

68. A computer readable medium tangibly embodying instructions according to claim 62, wherein said run once instruction lines reference software installation data packages, said data packages containing parameters associated with a desired software installation program.

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69. A computer readable medium tangibly embodying instructions according to claim 62, wherein said build plan is an executable file, said executable file being automatically runnable during startup when installed on a recipient computer.

10 70. A computer readable medium tangibly embodying instructions according to claim 69, wherein said executable file contains instructions which cause an event entry message to be written to an event log upon completion of execution of an installation program.

15 71. A computer readable medium tangibly embodying instructions according to claim 62, wherein the installation parameters include a value identifying whether a recipient computer should be initialized after execution of an installation program.

72. A computer readable medium tangibly embodying instructions according to claim 62, wherein the installation parameters include a data field for identifying programs required to be running on the recipient computer to enable an
5 installation program to install a desired software package.

73. A computer readable medium tangibly embodying instructions according to claim 62, wherein the installation parameters include a data field for identifying programs which can not be running on a recipient computer to allow an
10 installation program to install a desired software package.

74. A build plan for causing a recipient computer to install software onto itself, comprising:
an executable portion, said executable portion including at least one
15 executable instruction, the executable instruction starting at least one software supplier supplied installation program in accordance with an installation data package;
at least one installation data package, said installation data package corresponding to the at least one software supplier supplied installation program, said
installation data package identifying a command instruction for executing the at least one
20 software supplier supplied installation program.

75. A build plan according to claim 74, wherein the at least one installation data package includes a value signifying whether a recipient computer should be restarted upon completion of the at least one software supplier supplied installation program

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76. A build plan according to claim 74, wherein the at least one installation data package includes an address identifying a location where data required by the at least one software supplier supplied installation program can be accessed.

10 77. A build plan according to claim 76, wherein the executable portion further comprises an instruction causing the installation of a security feature onto a recipient computer to enable the recipient computer to access data required by the at least one software supplier supplied installation program.

15 78. A build plan according to claim 77, wherein the security feature is a certificate.

79. A build plan according to claim 77, wherein the security feature is an encryption key.

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80. A build plan according to claim 74, wherein the at least one installation data package identifies at least one software service that must be running on a recipient computer before a software supplier supplied installation program can successfully be executed.

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81. A build plan according to claim 74, wherein the at least one installation data package identifies at least one software service that must have completed execution prior to a software supplier supplied installation program in order for the software supplier supplied installation program to successfully be executed.

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82. A build plan according to claim 74, wherein the at least one installation data package identifies a response file, wherein said response file provides responses to queries, said queries being made by the at least one software supplier supplied installation program.

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83. A build plan according to claim 74, wherein the at least one executable instruction comprises a run-once line able to be inserted into a registry on a recipient computer.

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84. A build plan according to claim 74, wherein the executable portion further comprises an instruction which causes an entry noting the success or failure of a software supplier supplied installation program execution to be written to an event log.

85. A build plan according to claim 74, wherein the executable portion further comprises at least one instruction which when executed causes network identity information to be provided to a recipient computer.

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86. A build plan according to claim 85, wherein the network identity information comprises an address identifying a recipient computer to the internet.

87. A build plan according to claim 85, wherein the network identity
10 information comprises an address identifying a recipient computer to a local network.